



Heather Shirley Smith  
Deputy General Counsel

Duke Energy  
40 W. Broad Street  
Suite 690  
Greenville, SC 29601

o: 864.370.5045  
f: 864.370.5183

heather.smith@duke-energy.com

November 25, 2019

**VIA ELECTRONIC FILING**

The Honorable Jocelyn G. Boyd  
Chief Clerk/Administrator  
Public Service Commission of South Carolina  
101 Executive Center Drive, Suite 100  
Columbia, South Carolina 29210

**RE: Duke Energy Carolinas, LLC- Monthly Fuel Cost Report and Base Load  
Power Plant Performance Report  
Docket No. 1989-9-E**

Dear Ms. Boyd:

Pursuant to the Commission's Orders in the above captioned docket, enclosed please find the following reports for the month of October 2019.

1. Monthly Fuel Cost Report for October 2019 (Exhibit A).
2. Base Load Power Plan Performance Report for October 2019 (Exhibit B).

Sincerely,

Heather Shirley Smith

Enclosures

cc: Ms. Dawn Hipp, Office Regulatory Staff  
Ms. Nanette Edwards, Office Regulatory Staff  
Mr. Jeff Nelson, Office Regulatory Staff  
Mr. Michael Seaman-Huynh, Office Regulatory Staff  
Mr. Ryder Thompson, Office Regulatory Staff  
Mr. Scott Elliott, Elliott & Elliott, P.A.

DUKE ENERGY CAROLINAS  
SUMMARY OF MONTHLY FUEL REPORT

Line No.	October 2019
1 Fuel and Fuel-related Costs excluding DERP incremental costs	\$ 124,596,551
MWH sales:	
2 Total system sales.	7,071,870
3 Less intersystem sales	<u>63,469</u>
4 Total sales less intersystem sales	<u>7,008,401</u>
5 Total fuel and fuel-related costs (¢/KWH) (line 1/line 4)	<u>1.7778</u>
6 Current fuel and fuel-related cost component (¢/KWH) (per Schedule 4, Line 2 + Line 10 + Line 18)	<u>2.1407</u>
Generation Mix (MWH):	
Fossil (by primary fuel type):	
7 Coal	1,210,761
8 Fuel Oil	3,663
9 Natural Gas - Combined Cycle	907,041
10 Natural Gas - Combustion Turbine	117,541
11 Natural Gas - Steam	66,567
12 Biogas	<u>1,625</u>
13 Total fossil	<u>2,307,198</u>
14 Nuclear 100%	5,079,137
15 Hydro - Conventional	86,920
16 Hydro - Pumped storage	<u>(43,775)</u>
17 Total hydro	<u>43,145</u>
18 Solar Distributed Generation	11,340
19 Total MWH generation	7,440,820
20 Less joint owners' portion - Nuclear	1,186,660
21 Less joint owners' portion - Combined Cycle	<u>26,162</u>
22 Adjusted total MWH generation	<u>6,227,998</u>

Note: Detail amounts may not add to totals shown due to rounding.

DUKE ENERGY CAROLINAS  
DETAILS OF FUEL AND FUEL-RELATED COSTS

	October 2019	
Fuel and fuel-related costs:		
Steam Generation - Account 501		
0501110 coal consumed - steam	\$ 42,033,179	
0501310 fuel oil consumed - steam	282,036	
0501330 fuel oil light-off - steam	224,171	
Total Steam Generation - Account 501	<u>42,539,386</u>	
Nuclear Generation - Account 518		
0518100 burnup of owned fuel	23,329,113	
Other Generation - Account 547		
0547100, 0547124 natural gas consumed - Combustion Turbine	3,419,308	
0547100, 0547124 natural gas capacity - Combustion Turbine	831,601	
0547100 natural gas consumed - Steam	2,216,005	
0547101 natural gas consumed - Combined Cycle	16,959,374	
0547101 natural gas capacity - Combined Cycle	2,486,396	
0547106 biogas consumed - Combined Cycle	67,935	
0547200 fuel oil consumed - Combustion Turbine	23,439	
Total Other Generation - Account 547	<u>26,004,059</u>	
Purchased Power and Net Interchange - Account 555		
Fuel and fuel-related component of purchased power	29,308,417	
Fuel and fuel-related component of DERP purchases	26,014	A
PURPA purchased power capacity	3,576,925	
DERP purchased power capacity	3,670	A
Total Purchased Power and Net Interchange - Account 555	<u>32,915,026</u>	
Less:		
Fuel and fuel-related costs recovered through intersystem sales	1,701,407	
Fuel in loss compensation	82,812	
Solar Integration Charge	925	
Total Fuel Credits - Account 447/456	<u>1,785,144</u>	
Environmental Costs		
0509000, 0557451 emission allowance expense	417	
0502020, 0502030, 0502040, 0502082, 0548020 reagent expense	1,474,914	
0502080, 0502083, 0502090, 0502150 sorbent expense	142,234	
Emission allowance gains	-	
Less reagents expense recovered through intersystem sales - Account 447	16,262	
Less emissions expense recovered through intersystem sales - Account 447	7,192	
Total Environmental Component of Recovery	<u>1,594,111</u>	
Total Fuel and Fuel-related Costs excluding DERP incremental costs	<u>\$ 124,596,551</u>	
DERP incremental costs (including Greenwood)	483,746	A
Total Fuel and Fuel-related Costs to be Recovered	<u>\$ 125,080,297</u>	

Notes:

Detail amounts may not add to totals shown due to rounding.

Report reflects net ownership costs of jointly owned facilities.

A See Schedule 2 page 2 for DERP avoided and incremental cost details

DUKE ENERGY CAROLINAS  
DETAILS OF FUEL AND FUEL-RELATED COSTS

Fuel and fuel-related costs:

DERP Avoided Costs (Total Capacity and Energy)

Purchased Power Agreements	\$	970
Shared Solar Program		6,422
Total DERP Avoided Costs	\$	7,393

DERP Incremental Costs

Purchased Power Agreements	\$	1,131
DERP NEM Incentive		309,659
Solar Rebate Program - Amortization		12,751
Solar Rebate Program - Carrying Costs		12,126
Shared Solar Program		26,612
NEM Avoided Capacity Costs		32,281
NEM Meter Costs		56,186
General and Administrative Expenses		31,442
Interest on under-collection due to cap		-
Total DERP Incremental costs	\$	482,186

Notes:

Detail amounts may not add to totals shown due to rounding.  
All amounts represent SC retail excluding Greenwood.

**DUKE ENERGY CAROLINAS  
PURCHASED POWER AND INTERCHANGE  
SOUTH CAROLINA**

**October 2019**

<b>Purchased Power</b>	<b>Total</b>	<b>Capacity</b>	<b>Non-capacity</b>		
			<b>mWh</b>	<b>Fuel \$</b>	<b>Non-fuel \$</b>
<b>Marketers, Utilities, Other</b>	<b>\$</b>	<b>\$</b>			
Blue Ridge Electric Membership Corp.	\$ 823,630	\$ 378,722	24,784	\$ 444,908	-
Haywood Electric	339,828	172,178	6,234	167,650	-
Macquarie Energy, LLC	4,977,244	-	68,397	4,977,244	-
NCEMC	564,742	4,657	10,825	560,085	-
NCMPA	813,271	-	38,515	813,271	-
NTE Carolinas LLC	429,280	-	10,320	429,280	-
Piedmont Electric Membership Corp.	387,894	178,063	11,904	209,831	-
Piedmont Municipal Power Agency	378,516	-	18,665	378,516	-
PJM Interconnection, LLC.	(5,153)	-	-	(5,153)	-
South Carolina Electric & Gas Company / Dominion Energy	150	-	-	150	-
Southern Company Services, Inc.	614,030	-	8,998	614,030	-
Town of Dallas	584	584	-	-	-
Town of Forest City	19,856	19,856	-	-	-
DE Progress - As Available Capacity	108,864	108,864	-	-	-
DE Progress - Native Load Transfer	11,768,905	-	601,841	11,727,715	\$ 41,190
DE Progress - Native Load Transfer Benefit	1,458,041	-	-	1,458,041	-
Generation Imbalance	96,580	-	2,673	36,692	59,888
Energy Imbalance - Purchases	58,782	-	(1,636)	36,016	22,766
Energy Imbalance - Sales	(106,835)	-	-	(106,525)	(310)
	<b>\$ 22,728,209</b>	<b>\$ 862,924</b>	<b>801,520</b>	<b>\$ 21,741,751</b>	<b>\$ 123,534</b>
<b>Act 236 PURPA Purchases</b>					
Cherokee County Cogeneration Partners	\$ 778,877	\$ 213,366	19,368	\$ 565,511	-
Renewable Energy	7,078,557	2,179,103	95,385	4,899,454	-
DERP	38,888	3,670	651	26,014	9,204
Other Qualifying Facilities	3,897,720	1,184,456	55,729	2,605,902	107,362
	<b>\$ 11,794,042</b>	<b>\$ 3,580,595</b>	<b>171,133</b>	<b>\$ 8,096,881</b>	<b>\$ 116,566</b>
<b>Other Purchases</b>					
	<b>\$ 825</b>	<b>\$ -</b>	<b>24</b>	<b>\$ -</b>	<b>\$ 825</b>
<b>Total Purchased Power</b>					
	<b>\$ 34,523,076</b>	<b>\$ 4,443,519</b>	<b>972,677</b>	<b>\$ 29,838,632</b>	<b>\$ 240,925</b>
<b>Interchanges In</b>					
Other Catawba Joint Owners	6,450,112	-	601,433	3,875,096	2,575,016
WS Lee Joint Owner	1,051,623	-	45,098	869,697	181,926
Total Interchanges In	7,501,735	-	646,531	4,744,793	2,756,942
<b>Interchanges Out</b>					
Other Catawba Joint Owners	(7,373,881)	(134,209)	(685,498)	(4,417,351)	(2,822,321)
Catawba- Net Negative Generation	(64,915)	-	(3,027)	(54,250)	(10,665)
WS Lee Joint Owner	(955,611)	-	(39,634)	(777,393)	(178,218)
Total Interchanges Out	(8,394,407)	(134,209)	(728,159)	(5,248,994)	(3,011,204)
<b>Net Purchases and Interchange Power</b>	<b>\$ 33,630,404</b>	<b>\$ 4,309,310</b>	<b>891,049</b>	<b>\$ 29,334,431</b>	<b>\$ (13,337)</b>

NOTE: Detail amounts may not add to totals shown due to rounding.

**DUKE ENERGY CAROLINAS**  
**INTERSYSTEM SALES\***  
**SOUTH CAROLINA**

OCTOBER 2019

	Total	Capacity	Non-capacity		
Sales	\$	\$	mWh	Fuel \$	Non-fuel \$
<b>Utilities:</b>					
<b>Market Based:</b>					
Central Electric Power Cooperative, Inc.	\$ 458,000	\$ 458,000	-	-	-
Macquarie Energy, LLC	26,550	-	750	\$ 19,170	\$ 7,380
NCMPA	98,730	87,500	423	10,466	764
PJM Interconnection, LLC.	15,584	-	600	14,634	950
The Energy Authority	1,750	-	50	1,195	555
<b>Other:</b>					
DE Progress - Native Load Transfer Benefit	197,089	-	-	197,089	-
DE Progress - Native Load Transfer	1,490,841	-	59,935	1,409,512	81,329
Generation Imbalance	87,764	-	1,711	72,795	14,969
BPM Transmission	(88,007)	-			(88,007)
<b>Total Intersystem Sales</b>	<b>\$ 2,288,301</b>	<b>\$ 545,500</b>	<b>63,469</b>	<b>\$ 1,724,861</b>	<b>\$ 17,940</b>

\* Sales for resale other than native load priority.

NOTE: Detail amounts may not add to totals shown due to rounding.

**Duke Energy Carolinas**  
**(Over) / Under Recovery of Fuel Costs**  
**October 2019**

Line No.			Residential	Commercial	Industrial	Total
1	Actual System kWh sales	Input				7,008,401,161
2	DERP Net Metered kWh generation	Input				9,781,542
3	Adjusted System kWh sales	L1 + L2				7,018,182,703
4	Actual S.C. Retail kWh sales	Input	508,681,181	486,948,142	749,778,390	1,745,407,713
5	DERP Net Metered kWh generation	Input	5,731,152	2,229,702	1,820,688	9,781,542
6	Adjusted S.C. Retail kWh sales	L4 + L5	514,412,333	489,177,844	751,599,078	1,755,189,255
<b>Base fuel component of recovery: non-capacity</b>						
7	Incurred System base fuel - non-capacity expense	Input				\$116,077,834
8	Eliminate avoided fuel benefit of S.C. net metering	Input				317,974
9	Adjusted Incurred System base fuel - non-capacity expense	L7 + L8				\$116,395,808
10	Adjusted Incurred System base fuel - non-capacity rate (¢/kWh)	L9 / L3 * 100				1.6585
11	S.C. Retail portion of adjusted incurred system expense	L6 * L10 / 100	\$8,531,473	\$8,112,962	\$12,465,190	\$29,109,625
12	Assign 100 % of Avoided Fuel Benefit of S.C net metering	Input	(162,962)	(76,000)	(79,012)	(317,974)
13	S.C. Retail portion of incurred system expense	L11 + L12	\$8,368,511	\$8,036,962	\$12,386,178	\$28,791,651
14	14a Billed base fuel - non-capacity rate (¢/kWh)	Input	2.0376	2.0376	2.0376	2.0376
	<b>Rate Changes:</b>					
	14b New approved rates	Input	2.1166	2.1166	2.1166	
	14c Ratios of days to rate	Input	0.4793	0.4793	0.4793	
	14d Prior approved rates	Input	1.9648	1.9648	1.9648	
	14e Ratio of days to rate	Input	0.5207	0.5207	0.5207	
	14f Total prorate ¢/KWH	(L14b*L14c) + (L14d * L14e)	2.0376	2.0376	2.0376	
15	Billed base fuel - non-capacity revenue	L4 * L14 / 100	\$10,364,681	\$9,921,857	\$15,277,179	\$35,563,717
16	DERP NEM incentive - fuel component	Input	(64,188)	(29,935)	(31,121)	(125,244)
17	Adjusted S.C. billed base fuel - non-capacity revenue	L15 + L16	\$10,300,493	\$9,891,922	\$15,246,058	\$35,438,473
18	S.C. base fuel - non-capacity (over)/under recovery [See footnote]	L17 - L13	(\$1,931,982)	(\$1,854,960)	(\$2,859,880)	(\$6,646,822)
19	Adjustment	Input				
20	Total S.C. base fuel - non-capacity (over)/under recovery [See footnote]	L18 + L19	(\$1,931,982)	(\$1,854,960)	(\$2,859,880)	(\$6,646,822)
<b>Base fuel component of recovery: capacity</b>						
21	Incurred base fuel - capacity rates by class (¢/kWh)	Input	0.1730	0.0843	0.0569	0.0984
22	Incurred S.C. base fuel - capacity expense	L4 * L21 / 100	\$880,039	\$410,418	\$426,689	\$1,717,146
23	Billed base fuel - capacity rates by class (¢/kWh)	Input	0.1191	0.0737	0.0532	0.0781
	<b>Rate Changes:</b>					
	23b New approved rates	Input	0.1101	0.0279	0.0131	
	23c Ratios of days to rate	Input	0.4793	0.4793	0.4793	
	23d Prior approved rates	Input	0.1274	0.1158	0.0901	
	23e Ratio of days to rate	Input	0.5207	0.5207	0.5207	
	23f Total prorate ¢/KWH	(L23b*L23c) + (L23d * L23e)	0.1191	0.0737	0.0532	
24	Billed S.C. base fuel - capacity revenue	L4 * L23 / 100	605,880	358,728	398,830	1,363,438
25	S.C. base fuel - capacity (over)/under recovery [See footnote]	L24 - L22	274,159	51,690	27,859	353,708
26	Adjustment	Input				
27	Total S.C. base fuel - capacity (over)/under recovery [See footnote]	L25 + L26	\$274,159	\$51,690	\$27,859	\$353,708

**Duke Energy Carolinas**  
**(Over) / Under Recovery of Fuel Costs**  
**October 2019**

Line No.

**Environmental component of recovery**

28	Incurred environmental rates by class (¢/kWh)	Input	0.0400	0.0195	0.0132	0.0227
29	Incurred S.C. environmental expense	L4 * L28 / 100	\$203,466	\$94,889	\$98,651	\$397,006
30	Billed environmental rates by class (¢/kWh)	Input	0.0375	0.0220	0.0163	0.0241
	<b>Rate Changes:</b>					
30b	New approved rates	Input	0.0603	0.0249	0.0158	
30c	Ratios of days to rate	Input	0.4793	0.4793	0.4793	
30d	Prior approved rates	Input	0.0166	0.0193	0.0168	
30e	Ratio of days to rate	Input	0.5207	0.5207	0.5207	
30f	Total prorate ¢/KWH	(L30b*L30c) + (L30d * L30e)	0.0375	0.0220	0.0163	
31	Billed S.C. environmental revenue	L4 * L30 / 100	190,989	107,051	122,369	420,409
32	S.C. environmental (over)/under recovery [See footnote]	L31 - L29	12,477	(12,162)	(23,718)	(23,403)
33	Adjustment	Input				
34	Total S.C. environmental (over)/under recovery [See footnote]	L32 + L33	\$12,477	(\$12,162)	(\$23,718)	(\$23,403)

**Distributed Energy Resource Program component of recovery: avoided costs**

35	Incurred S.C. DERP avoided cost rates by class (¢/kWh)	Input	0.0007	0.0004	0.0002	0.0004
36	Incurred S.C. DERP avoided cost expense	L4 * L35 / 100	\$3,789	\$1,767	\$1,837	\$7,393
37	Billed S.C. DERP avoided cost rates by class (¢/kWh)	Input	0.0016	0.0008	0.0005	0.0009
	<b>Rate Changes:</b>					
37b	New approved rates	Input	0.0026	0.0012	0.0007	
37c	Ratios of days to rate	Input	0.4793	0.4793	0.4793	
37d	Prior approved rates	Input	0.0006	0.0005	0.0004	
37e	Ratio of days to rate	Input	0.5207	0.5207	0.5207	
37f	Total prorate ¢/KWH	(L37b*L37c) + (L37d * L37e)	0.0016	0.0008	0.0005	
38	Billed S.C. DERP avoided cost revenue	L4 * L37 / 100	7,928	4,069	4,077	16,074
39	S.C. DERP avoided cost (over)/under recovery [See footnote]	L38 - L36	(4,139)	(2,302)	(2,240)	(8,681)
40	Adjustment	Input				
41	Total S.C. DERP avoided cost (over)/under recovery [See footnote]	L39 + L40	<b>(\$4,139)</b>	<b>(\$2,302)</b>	<b>(2,240)</b>	<b>(\$8,681)</b>

**Distributed Energy Resource Program component of recovery: incremental costs**

42	Incurred S.C. DERP incremental expense	Input	\$247,121	\$115,248	\$119,817	\$482,186
43	Billed S.C. DERP incremental rates (\$/account)	Input	\$0.62	\$1.95	\$94.41	\$0
44	Billed S.C. DERP incremental revenue	Input	378,482	242,158	147,492	768,132
45	S.C. DERP incremental (over)/under recovery [See footnote]	L44 - L42	(131,361)	(126,910)	(27,675)	(285,946)
46	Adjustment	Input				
47	Total S.C. DERP incremental (over)/under recovery [See footnote]	L45 + L46	<b>(\$131,361)</b>	<b>(\$126,910)</b>	<b>(\$27,675)</b>	<b>(\$285,946)</b>
48	Total S.C. Retail (over)/under recovery [See footnote]	L20 + L27 + L34 + L41 + L47	<b>(\$1,780,846)</b>	<b>(\$1,944,644)</b>	<b>(\$2,885,654)</b>	<b>(\$6,611,144)</b>



**Duke Energy Carolinas**  
**(Over) / Under Recovery of Fuel Costs**  
**October 2019**

Line No.

**Year 2018-2019**

**Cumulative (over) / under recovery - BASE FUEL NON-CAPACITY**

	Cumulative	Residential	Commercial	Industrial	Total Company
_/1 Balance ending May 2019	86,217,228				
June 2019 - actual	82,255,888	(1,219,800)	(1,055,550)	(1,685,990)	(3,961,340)
July 2019 - actual	84,427,056	766,937	598,765	805,466	2,171,168
August 2019 - actual	82,624,428	(581,904)	(486,138)	(734,586)	(1,802,628)
September 2019 - actual	81,434,474	(371,276)	(325,777)	(492,901)	(1,189,954)
_/2 October 2019 - actual	74,787,652	(1,931,982)	(1,854,960)	(2,859,880)	(6,646,822)
November 2019 - forecast	71,049,496	(984,260)	(1,054,041)	(1,699,855)	(3,738,156)
December 2019 - forecast	66,090,186	(1,550,805)	(1,320,796)	(2,087,709)	(4,959,310)
January 2020 - forecast	59,558,749	(2,346,359)	(1,631,360)	(2,553,718)	(6,531,437)
February 2020 - forecast	52,040,840	(2,693,998)	(1,885,514)	(2,938,397)	(7,517,909)
March 2020 - forecast	44,868,083	(2,393,899)	(1,843,482)	(2,935,376)	(7,172,757)
April 2020 - forecast	36,793,547	(2,320,777)	(2,198,645)	(3,555,114)	(8,074,536)
May 2020 - forecast	33,559,456	(838,104)	(920,367)	(1,475,620)	(3,234,091)

**Year 2018-2019**

**Cumulative (over) / under recovery - BASE FUEL CAPACITY**

	Cumulative	Residential	Commercial	Industrial	Total Company
0 Balance ending May 2019	(5,379,539)				
_/1 June 2019 - actual	(5,862,192)	46,028	(204,425)	(324,256)	(482,653)
July 2019 - actual	(5,519,818)	435,923	(37,726)	(55,823)	342,374
August 2019 - actual	(5,136,171)	481,932	(10,865)	(87,420)	383,647
September 2019 - actual	(5,356,968)	175,954	(159,646)	(237,105)	(220,797)
_/2 October 2019 - actual	(5,678,035)	(155,607)	(165,705)	245	(321,067)
November 2019 - forecast	(5,311,637)	75,438	125,076	165,884	366,398
December 2019 - forecast	(4,985,448)	(9,387)	145,606	189,970	326,189
January 2020 - forecast	(4,613,630)	(56,878)	190,474	238,222	371,818
February 2020 - forecast	(4,163,806)	(15,799)	208,267	257,356	449,824
March 2020 - forecast	(3,761,006)	(721)	179,251	224,270	402,800
April 2020 - forecast	(3,060,653)	217,609	219,211	263,533	700,353
May 2020 - forecast	(2,039,038)	417,391	278,279	325,945	1,021,615

**Year 2018-2019**

**Cumulative (over) / under recovery - ENVIRONMENTAL**

	Cumulative	Residential	Commercial	Industrial	Total Company
_/1 Beginning Balance	(965,535)				
June 2019 - actual	(672,086)	219,527	52,209	21,713	293,449
July 2019 - actual	(315,575)	248,540	60,980	46,991	356,511
August 2019 - actual	70,934	268,872	71,162	46,475	386,509
September 2019 - actual	357,666	217,485	46,855	22,392	286,732
_/2 October 2019 - actual	334,263	12,477	(12,162)	(23,718)	(23,403)
November 2019 - forecast	378,471	16,389	12,852	14,967	44,208
December 2019 - forecast	330,631	(65,506)	6,670	10,996	(47,840)
January 2020 - forecast	466,833	(9,269)	68,768	76,703	136,202
February 2020 - forecast	578,699	(20,966)	62,312	70,520	111,866
March 2020 - forecast	446,713	(124,837)	(4,997)	(2,152)	(131,986)
April 2020 - forecast	297,621	(98,048)	(25,554)	(25,490)	(149,092)
May 2020 - forecast	212,912	(45,839)	(20,085)	(18,785)	(84,709)

**Duke Energy Carolinas**  
**(Over) / Under Recovery of Fuel Costs**  
**October 2019**

Line No.

**Year 2018-2019**

**Cumulative (over) / under recovery - DERP AVOIDED COSTS**

	Cumulative	Residential	Commercial	Industrial	Total Company
_1 Beginning Balance	(1,470)	-	-	-	-
June 2019 - actual	(2,091)	851	(443)	(1,029)	(621)
July 2019 - actual	(5,879)	(940)	(1,320)	(1,528)	(3,788)
August 2019 - actual	(8,781)	(377)	(1,032)	(1,493)	(2,902)
September 2019 - actual	(11,397)	(207)	(987)	(1,422)	(2,616)
_2 October 2019 - actual	(20,078)	(4,139)	(2,302)	(2,240)	(8,681)
November 2019 - forecast	(36,369)	(8,252)	(4,202)	(3,837)	(16,291)
December 2019 - forecast	(39,828)	(3,167)	(462)	170	(3,459)
January 2020 - forecast	(41,460)	(3,866)	747	1,487	(1,632)
February 2020 - forecast	(40,885)	(2,700)	1,245	2,030	575
March 2020 - forecast	(27,609)	4,714	3,900	4,662	13,276
April 2020 - forecast	(20,522)	3,069	1,719	2,299	7,087
May 2020 - forecast	(11,986)	4,641	1,636	2,259	8,536

**Year 2018-2019**

**Cumulative (over) / under recovery - DERP INCREMENTAL COSTS**

	Cumulative	Residential	Commercial	Industrial	Total Company
_1 Balance ending May 2019	(474,257)				
June 2019 - actual	(851,820)	(167,262)	(193,565)	(16,736)	(377,563)
July 2019 - actual	(1,290,039)	(194,017)	(213,903)	(30,299)	(438,219)
August 2019 - actual	(1,717,459)	(190,305)	(208,908)	(28,207)	(427,420)
September 2019 - actual	(2,151,142)	(193,884)	(211,260)	(28,539)	(433,683)
_2 October 2019 - actual	(2,437,088)	(131,361)	(126,910)	(27,675)	(285,946)
November 2019 - forecast	(2,494,134)	(29,236)	(13,635)	(14,175)	(57,046)
December 2019 - forecast	(2,583,604)	(45,854)	(21,384)	(22,232)	(89,470)
January 2020 - forecast	(2,588,642)	(2,582)	(1,204)	(1,252)	(5,038)
February 2020 - forecast	(2,541,694)	24,061	11,221	11,666	46,948
March 2020 - forecast	(2,416,787)	64,015	29,854	31,038	124,907
April 2020 - forecast	(2,161,033)	131,074	61,128	63,552	255,754
May 2020 - forecast	(1,908,487)	129,430	60,362	62,754	252,546

**Notes:**

Detail amounts may not recalculate due to percentages presented as rounded.

Presentation of over or under collected amounts reflects a regulatory asset or liability. Over collections, or regulatory liabilities, are shown as negative amounts.

Under collections, or regulatory assets, are shown as positive amounts.

- \_1 May 2019 ending balance reflects adjustments pursuant to the docket no. 2019-3-E directive.  
The total adjustment of \$(55,699) was made to the May ending balance
- \_2 Reflects a prorated rate and prorated allocation factor for periods in which the approved rates changed.
- \_3 Includes prior period adjustments.

DUKE ENERGY CAROLINAS  
 FUEL AND FUEL RELATED COST REPORT  
 OCTOBER 2019

Description	Allen Steam	Belews Creek Steam	Buck CC	Catawba Nuclear	Cliffside Steam - Dual Fuel	Dan River CC	Lee CC	Lee Steam/CT	Lincoln CT	Marshall Steam	McGuire Nuclear	Mill Creek CT	Oconee Nuclear	Rockingham CT	Current Month	Total 12 ME October 2019
<b>Cost of Fuel Purchased (\$)</b>																
Coal	\$3,760,615	\$24,454,083			\$16,263,069					\$27,672,098					\$72,149,864	\$682,190,608
Oil	(15,489)	106,098			226,169					91,975					408,753	15,167,006
Gas - CC			\$9,622,705			\$5,904,637	\$4,452,697								19,980,039	362,898,702
Gas - CT								73,161	\$304,212			\$419,438		\$3,454,099	4,250,910	40,521,664
Gas - Steam					2,216,005										2,216,005	46,716,320
Biogas			252,662												252,662	2,264,739
Total	\$3,745,126	\$24,560,181	\$9,875,367		\$18,705,242	\$5,904,637	\$4,452,697	\$73,161	\$304,212	\$27,764,073		\$419,438		\$3,454,099	\$99,258,232	\$1,149,759,039
<b>Average Cost of Fuel Purchased (c/MBTU)</b>																
Coal	409.36	375.11			390.40					476.32					414.34	350.14
Oil	1,488.99	1,470.93			1,461.60					1,483.55					1,467.88	834.63
Gas - CC			311.89			311.82	320.66								311.86	349.06
Gas - CT								403.52	320.86			314.13		313.64	315.41	338.40
Gas - Steam					324.43			731.61							324.43	368.40
Biogas			2,178.12												2,178.12	1,761.10
Weighted Average	408.14	376.32	318.88		384.55	311.82	320.66	403.52	320.86	477.39		314.13		313.64	383.97	353.34
<b>Cost of Fuel Burned (\$)</b>																
Coal	\$2,984,166	\$2,900,882			\$14,686,052					\$21,462,080					\$42,033,179	\$679,708,597
Oil - CC																
Oil - Steam/CT	1,234	5,091			170,117				\$13,212	329,765					529,646	15,787,996
Gas - CC			\$9,622,705			\$5,904,637	\$4,452,697								19,980,039	362,898,702
Gas - CT								\$73,161	304,212			\$419,438		\$3,454,099	4,250,910	40,521,664
Gas - Steam					2,216,005										2,216,005	46,716,320
Biogas			252,662												252,662	2,264,739
Nuclear				\$8,826,744							\$10,462,499		\$11,167,819		30,457,062	362,770,821
Total	\$2,985,400	\$2,905,973	\$9,875,367	\$8,826,744	\$17,072,173	\$5,904,637	\$4,452,697	\$73,161	\$317,423	\$21,791,844	\$10,462,499	\$419,438	\$11,167,819	\$3,454,099	\$99,719,503	\$1,510,668,839
<b>Average Cost of Fuel Burned (c/MBTU)</b>																
Coal	371.83	327.55			309.60					387.48					351.14	345.93
Oil - CC																
Oil - Steam/CT	1,435.45	1,442.25			1,455.98				1,515.10	1,460.62					1,488.94	1,500.53
Gas - CC			311.89			311.82	320.66								311.86	349.06
Gas - CT								403.52	320.86			314.13		313.64	315.41	338.40
Gas - Steam					324.43			731.61							324.43	368.40
Biogas			2,178.12												2,178.12	1,761.10
Nuclear				59.06							59.52		58.31		58.94	59.19
Weighted Average	371.94	328.00	318.88	59.06	313.93	311.82	320.66	403.52	331.74	391.83	59.52	314.13	58.31	313.64	138.32	160.86
<b>Average Cost of Generation (c/kWh)</b>																
Coal	4.35	3.14			3.01					3.82					3.47	3.34
Oil - CC																
Oil - Steam/CT	16.63	13.55			13.48				21.38	14.37					14.46	15.12
Gas - CC			2.23			2.19	2.17								2.20	2.47
Gas - CT								4.28	4.58			4.08		3.49	3.62	3.88
Gas - Steam					3.30										3.33	3.71
Biogas			15.55												15.55	12.57
Nuclear				0.60							0.60		0.60		0.60	0.60
Weighted Average	4.35	3.15	2.28	0.60	3.06	2.19	2.17	6.73	4.74	3.87	0.60	4.08	0.60	3.49	1.34	1.51

DUKE ENERGY CAROLINAS  
 FUEL AND FUEL RELATED COST REPORT  
 OCTOBER 2019

Description	Allen	Belews Creek	Buck	Catawba	Cliffside	Dan River	Lee	Lee	Lincoln	Marshall	McGuire	Mill Creek	Oconee	Rockingham	Current Month	Total 12 ME October 2019
	Steam	Steam	CC	Nuclear	Steam - Dual Fuel	CC	CC	Steam/CT	CT	Steam	Nuclear	CT	Nuclear	CT		
<b>Burned MBTU's</b>																
Coal	802,560	885,617			4,743,490			-		5,538,956					11,970,623	196,489,800
Oil - CC															-	-
Oil - Steam/CT	86	353			11,684			-	872	22,577		-		-	35,572	1,052,163
Gas - CC			3,085,306			1,893,619	1,388,623								6,367,548	103,965,253
Gas - CT								18,131	94,811			133,525		1,101,281	1,347,748	11,974,657
Gas - Steam					683,044			-							683,044	12,681,029
Biogas			11,600			-	-								11,600	128,598
Nuclear				14,945,844							17,577,112		19,153,921		51,676,877	612,852,324
Total	802,646	885,970	3,096,906	14,945,844	5,438,218	1,893,619	1,388,623	18,131	95,683	5,561,533	17,577,112	133,525	19,153,921	1,101,281	72,093,012	939,143,824
<b>Net Generation (mWh)</b>																
Coal	68,614	92,278			488,653					561,217					1,210,761	20,376,473
Oil - CC															-	-
Oil - Steam/CT	7	38			1,262	-	-	-	62	2,294		-		-	3,663	104,451
Gas - CC			432,194			269,417	205,430	-							907,041	14,669,359
Gas - CT								1,709	6,635			10,277		98,920	117,541	1,043,329
Gas - Steam					67,189			(622)							66,567	1,258,553
Biogas			1,625			-	-								1,625	18,014
Nuclear 100%				1,469,475							1,749,550		1,860,112		5,079,137	60,620,100
Hydro (Total System)															43,145	1,993,486
Solar (Total System)															11,340	136,466
Total	68,621	92,316	433,819	1,469,475	557,103	269,417	205,430	1,087	6,697	563,511	1,749,550	10,277	1,860,112	98,920	7,440,820	100,220,231
<b>Cost of Reagents Consumed (\$)</b>																
Ammonia		\$89,440	\$15,705		\$117,966	\$6,594	\$5,787								\$235,491	\$3,250,581
Limestone	\$16,402	165,448			584,606					\$429,483					1,195,940	17,583,400
Sorbents	-	-								121,948					121,948	1,928,621
Urea	4,855									39,366					44,220	545,902
Re-emission Chemical		-													-	288,819
Dibasic Acid	-														-	-
Activated Carbon	20,286									-					20,286	205,863
Lime (water emissions)	-	-								14,817					14,817	257,972
Total	\$41,543	\$254,888	\$15,705		\$702,572	\$6,594	\$5,787			\$605,614					\$1,632,702	\$24,061,158

**Notes:**

Detail amounts may not add to totals shown due to rounding.  
 Data is reflected at 100% ownership.  
 Schedule excludes in-transit and terminal activity.  
 Cents/MBTU and cents/kWh are not computed when costs and/or net generation is negative.  
 Re-emission chemical reagent expense is not recoverable in NC.  
 Lime (water emissions) expense is not recoverable in SC fuel clause.

DUKE ENERGY CAROLINAS  
FUEL AND FUEL RELATED CONSUMPTION AND INVENTORY REPORT  
OCTOBER 2019

Description	Allen Steam	Belews Creek Steam	Buck CC	Cliffside Steam - Dual Fuel	Dan River CC	Lee CC	Lee Steam/CT	Lincoln CT	Marshall Steam	Mill Creek CT	Rockingham CT	Current Month	Total 12 ME October 2019
<b>Coal Data:</b>													
Beginning balance	103,775	616,455		553,686			-		480,408			1,754,324	2,079,408
Tons received during period	37,861	267,177		165,502					232,719			703,259	8,035,576
Inventory adjustments	-	(0)		0			-		0			0	(195,698)
Tons burned during period	34,721	35,490		190,913			-		220,598			481,722	7,943,423
Ending balance	106,914	848,142		528,276			-		492,529			1,975,861	1,975,861
MBTUs per ton burned	23.11	24.95		24.85			-		25.11			24.85	24.74
Cost of ending inventory (\$/ton)	85.95	81.74		76.93			-		97.29			84.56	84.56
<b>Oil Data:</b>													
Beginning balance	108,613	185,438	-	181,794	-	-	604,960	9,727,448	340,907	4,366,782	3,238,190	18,754,132	19,180,034
Gallons received during period	(7,538)	52,268	-	112,131	-	-	-	-	44,925	-	-	201,786	7,492,944
Miscellaneous adjustments	-	(12,502)	-	(9,958)	-	-	-	-	-	-	-	(21,753)	(357,453)
Gallons burned during period	618	2,547	-	84,700	-	-	-	6,304	163,211	-	-	258,087	7,639,447
Ending balance	100,457	222,657	-	199,267	-	-	604,960	9,721,144	222,621	4,366,782	3,238,190	18,676,078	18,676,078
Cost of ending inventory (\$/gal)	2.00	2.00	-	2.01	-	-	2.33	2.10	2.02	2.47	2.17	2.20	2.20
<b>Natural Gas Data:</b>													
Beginning balance													
MCF received during period			2,985,228	661,019	1,836,346	1,351,374	17,675	91,768		130,035	1,065,891	8,139,334	125,024,464
MCF burned during period			2,985,228	661,019	1,836,346	1,351,374	17,675	91,768		130,035	1,065,891	8,139,334	125,024,464
Ending balance													
<b>Biogas Data:</b>													
Beginning balance													
MCF received during period			11,224		-	-						11,224	124,581
MCF burned during period			11,224		-	-						11,224	124,581
Ending balance													
<b>Limestone Data:</b>													
Beginning balance	25,122	41,006		35,406					60,751			162,286	134,299
Tons received during period	-	19,470		-					20,160			39,630	470,846
Inventory adjustments	-	-		-					-			-	(14,990)
Tons consumed during period	360	4,278		10,210					11,851			26,699	414,938
Ending balance	24,762	56,198		25,196					69,060			175,217	175,217
Cost of ending inventory (\$/ton)	45.56	37.54		39.90					36.24			38.50	38.50
<b>Ammonia Data:</b>													
Beginning balance		1,861										1,861	1,327
Tons received during period		915										915	3,481
Tons consumed during period		1,662										1,662	3,695
Ending balance		1,113										1,113	1,113
Cost of ending inventory (\$/ton)		488.17										488.17	488.17

**Notes:**

Detail amounts may not add to totals shown due to rounding.

Schedule excludes in-transit and terminal activity.

Gas is burned as received; therefore, inventory balances are not maintained.

Qtr Ending September 2019	Total 12 ME September 2019
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**DUKE ENERGY CAROLINAS**  
**ANALYSIS OF COAL PURCHASED**  
**OCTOBER 2019**

<b>STATION</b>	<b>TYPE</b>	<b>QUANTITY OF TONS DELIVERED</b>	<b>DELIVERED COST</b>	<b>DELIVERED COST PER TON</b>
<b>ALLEN</b>	SPOT	-	\$ 3,648	\$ -
	CONTRACT	37,861	2,655,050	70.13
	FIXED TRANSPORTATION / ADJUSTMENTS	-	1,101,917	-
	TOTAL	37,861	3,760,615	99.33
<b>BELEWS CREEK</b>	SPOT	77,080	4,975,723	64.55
	CONTRACT	190,097	12,593,807	66.25
	FIXED TRANSPORTATION / ADJUSTMENTS	-	6,884,553	-
	TOTAL	267,177	24,454,083	91.53
<b>CLIFFSIDE</b>	SPOT	76,365	5,029,445	65.86
	CONTRACT	89,137	5,988,298	67.18
	FIXED TRANSPORTATION / ADJUSTMENTS	-	5,245,325	-
	TOTAL	165,502	16,263,069	98.26
<b>MARSHALL</b>	SPOT	78,405	4,918,056	62.73
	CONTRACT	154,314	10,176,268	65.95
	FIXED TRANSPORTATION / ADJUSTMENTS	-	12,577,775	-
	TOTAL	232,719	27,672,098	118.91
<b>ALL PLANTS</b>	SPOT	231,850	14,926,872	64.38
	CONTRACT	471,409	31,413,423	66.64
	FIXED TRANSPORTATION / ADJUSTMENTS	-	25,809,570	-
	TOTAL	703,259	\$ 72,149,864	\$ 102.59

**DUKE ENERGY CAROLINAS**  
**ANALYSIS OF COAL QUALITY RECEIVED**  
**OCTOBER 2019**

<b>STATION</b>	<b>PERCENT MOISTURE</b>	<b>PERCENT ASH</b>	<b>HEAT VALUE</b>	<b>PERCENT SULFUR</b>
<b>ALLEN</b>	6.29	11.74	12,132	0.85
<b>BELEWS CREEK</b>	6.70	11.54	12,200	1.14
<b>CLIFFSIDE</b>	7.17	8.88	12,585	2.18
<b>MARSHALL</b>	6.28	10.45	12,482	1.48

**DUKE ENERGY CAROLINAS**  
**ANALYSIS OF OIL PURCHASED**  
**OCTOBER 2019**

	<b>ALLEN</b>	<b>BELEWS CREEK</b>
<b>VENDOR</b>	HighTowers	HighTowers
<b>SPOT/CONTRACT</b>	Contract	Contract
<b>SULFUR CONTENT %</b>	0	0
<b>GALLONS RECEIVED</b>	(7,538)	52,268
<b>TOTAL DELIVERED COST</b>	\$ (15,489)	\$ 106,098
<b>DELIVERED COST/GALLON</b>	\$ 2.05	\$ 2.03
<b>BTU/GALLON</b>	138,000	138,000
	<b>CLIFFSIDE</b>	<b>MARSHALL</b>
<b>VENDOR</b>	HighTowers	HighTowers
<b>SPOT/CONTRACT</b>	Contract	Contract
<b>SULFUR CONTENT %</b>	0	0
<b>GALLONS RECEIVED</b>	112,131	44,925
<b>TOTAL DELIVERED COST</b>	\$ 226,169	\$ 91,975
<b>DELIVERED COST/GALLON</b>	\$ 2.02	\$ 2.05
<b>BTU/GALLON</b>	138,000	138,000



**Duke Energy Carolinas**  
**Power Plant Performance Data**  
**Twelve Month Summary**  
November, 2018 - October, 2019  
Nuclear Units

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<u>Unit Name</u>	<u>Net Generation (mWh)</u>	<u>Capacity Rating (mW)</u>	<u>Capacity Factor (%)</u>	<u>Equivalent Availability (%)</u>
Oconee 1	7,035,932	847	94.83	93.68
Oconee 2	7,547,046	848	101.60	99.99
Oconee 3	7,594,168	859	100.92	99.99
McGuire 1	9,278,038	1,158	91.46	90.28
McGuire 2	10,326,563	1,158	101.80	99.99
Catawba 1	9,496,129	1,160	93.45	92.98
Catawba 2	9,342,224	1,150	92.74	92.81

**Duke Energy Carolinas**  
**Power Plant Performance Data**  
**Twelve Month Summary**  
**November, 2018 through October, 2019**  
**Combined Cycle Units**

Unit Name		Net Generation (mWh)	Capacity Rating (mW)	Capacity Factor (%)	Equivalent Availability (%)
Buck CC	11	1,267,333	206	70.23	77.27
Buck CC	12	1,270,297	206	70.39	77.20
Buck CC	ST10	1,882,982	312	68.89	83.25
Buck CC	Block Total	4,420,612	724	69.70	79.83
Dan River CC	8	1,421,994	199	81.57	84.90
Dan River CC	9	1,414,450	199	81.14	84.85
Dan River CC	ST7	2,120,934	320	75.66	92.42
Dan River CC	Block Total	4,957,378	718	78.82	88.24
WS Lee CC	11	1,570,841	235	76.42	78.87
WS Lee CC	12	1,567,361	234	76.52	78.09
WS Lee CC	ST10	2,171,181	337	73.55	76.84
WS Lee CC	Block Total	5,309,383	806	75.25	77.84

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.
- Data is reflected at 100% ownership.

**Duke Energy Carolinas  
Power Plant Performance Data  
Twelve Month Summary  
November, 2018 through October, 2019**

**Baseload Steam Units**

<b>Unit Name</b>	<b>Net Generation (mWh)</b>	<b>Capacity Rating (mW)</b>	<b>Capacity Factor (%)</b>	<b>Equivalent Availability (%)</b>
Belews Creek 1	4,025,065	1,110	41.39	74.13
Belews Creek 2	3,458,309	1,110	35.57	69.79
Marshall 3	2,414,079	658	41.88	73.81
Marshall 4	3,110,417	660	53.80	78.95

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.

**Duke Energy Carolinas  
Power Plant Performance Data  
Twelve Month Summary  
November, 2018 through October, 2019**

**Intermediate Steam Units**

<b>Unit Name</b>	<b>Net Generation (mWh)</b>	<b>Capacity Rating (mW)</b>	<b>Capacity Factor (%)</b>	<b>Equivalent Availability (%)</b>
Cliffside 6	4,401,066	848	59.23	78.38
Marshall 1	906,360	380	27.23	73.18
Marshall 2	1,052,870	380	31.63	70.61

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.

**Duke Energy Carolinas**  
**Power Plant Performance Data**  
**Twelve Month Summary**  
**November, 2018 through October, 2019**  
**Other Cycling Steam Units**

Unit Name		Net Generation (mWh)	Capacity Rating (mW)	Capacity Factor (%)	Operating Availability (%)
Allen	1	115,939	167	7.93	88.30
Allen	2	88,258	167	6.03	88.57
Allen	3	131,826	270	5.57	76.29
Allen	4	152,007	267	6.50	82.69
Allen	5	344,953	259	15.20	84.98
Cliffside	5	1,540,373	546	32.21	73.82
Lee	3	-5,828	173	0.00	74.03

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.

**Duke Energy Carolinas  
Power Plant Performance Data  
Twelve Month Summary  
November, 2018 through October, 2019  
Combustion Turbine Stations**

<b>Station Name</b>	<b>Net Generation (mWh)</b>	<b>Capacity Rating (mW)</b>	<b>Operating Availability (%)</b>
Lee CT	11,239	96	92.87
Lincoln CT	25,393	1,565	93.55
Mill Creek CT	89,059	753	98.52
Rockingham CT	921,420	895	91.50

**Notes:**

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.

# Duke Energy Carolinas Power Plant Performance Data

Exhibit A  
Schedule 10  
Page 7 of 7

## Twelve Month Summary November, 2018 through October, 2019 Hydroelectric Stations

Station Name	Net Generation (mWh)	Capacity Rating (mW)	Operating Availability (%)
<b>Conventional Hydroelectric Stations:</b>			
Bear Creek	22,299	9.5	67.34
Bridgewater	96,215	31.5	95.59
Bryson	3,117	0.8	98.27
Cedar Cliff	26,881	6.8	99.33
Cedar Creek	197,295	45.0	93.83
Cowans Ford	302,771	324.0	65.98
Dearborn	179,788	42.0	85.58
Fishing Creek	201,277	50.0	87.52
Franklin	1,464	0.8	66.79
Gaston Shoals	9,104	3.8	97.14
Great Falls	-75	12.0	71.23
Keowee	100,322	152.0	94.19
Lookout Shoals	155,053	27.0	99.20
Mission	3,381	1.5	63.47
Mountain Island	202,007	62.0	79.40
Nantahala	245,927	50.0	89.93
Ninety-Nine Islands	74,938	15.2	66.00
Oxford	134,901	40.0	89.66
Queens Creek	5,940	1.4	95.30
Rhodhiss	104,686	33.4	95.51
Tennessee Creek	25,691	9.8	41.72
Thorpe	111,396	19.7	97.67
Tuckasegee	10,096	2.5	91.79
Tuxedo	24,184	5.3	98.89
Wateree	362,757	85.0	93.39
Wylie	80,099	72.0	18.17
<b>Pumped Storage Hydroelectric Stations:</b>			
<b>Gross Generation</b>			
Bad Creek	2,115,130	1,360.0	91.53
Jocassee	1,115,897	780.0	91.10
<b>Energy for Pumping</b>			
Bad Creek	-2,682,096		
Jocassee	-1,236,959		
<b>Net Generation</b>			
Bad Creek	-566,966		
Jocassee	-121,062		

**Notes:**

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.

<div>Duke Energy Carolinas</div> <div>Base Load Power Plant Performance Review Plan</div> <div>Period: October, 2019</div>							
Station	Unit	Date of Outage	Duration of Outage	Scheduled / Unscheduled	Cause of Outage	Reason Outage Occurred	Remedial Action Taken
Oconee	1	None					
	2	None					
	3	None					
McGuire	1	None					
	2	None					
Catawba	1	None					
	2	09/14/2019 - 10/09/2019	194.88	Scheduled	End-of-cycle 23 refueling outage	Planned refueling outage.	Planned refueling outage.
	2	10/09/2019 - 10/09/2019	2.03	Scheduled	Turbine overspeed trip test	Planned turbine overspeed trip test.	Planned turbine overspeed trip test.



**Duke Energy Carolinas  
Base Load Power Plant  
Performance Review Plan  
October 2019**

**Belews Creek Station**

Unit	Duration of Outage	Type of Outage	Cause of Outage	Reason Outage Occurred	Remedial Action Taken
1	10/1/2019 12:00:00 AM To 12/12/2019 12:01:00 AM	Sch	1800 Major Boiler Overhaul (720 Hours or Longer)	Unit 1 Planned Outage Gas Co-Fire Outage	
2	10/5/2019 6:22:00 AM To 11/4/2019 12:01:00 AM	Sch	3975 Distributive Control System Upgrades	Unit 2 Planned Outage Evergreen Ovation Upgrade	

**Buck Combined Cycle Station**

Unit	Duration of Outage	Type of Outage	Cause of Outage	Reason Outage Occurred	Remedial Action Taken
11	10/13/2019 12:20:00 AM To 10/15/2019 2:02:00 AM	Sch	5261 Gas Turbine Cleaning	GT11: Repair and calibrate steam control valves	
12	10/13/2019 12:20:00 AM To 10/15/2019 2:02:00 AM	Sch	5261 Gas Turbine Cleaning	GT12: Repair and calibrate steam control valves	
ST10	10/12/2019 11:46:00 PM To 10/15/2019 3:01:00 AM	Sch	4261 Turbine Control Valves	ST10: Repair and calibrate steam control valves	

**Dan River Combined Cycle Station**

Unit	Duration of Outage	Type of Outage	Cause of Outage	Reason Outage Occurred	Remedial Action Taken
8	10/19/2019 12:11:00 AM To 11/1/2019 12:00:00 AM	Sch	5260 Major Gas Turbine Overhaul	Gas Turbine Major	
9	10/19/2019 12:11:00 AM To 11/1/2019 12:00:00 AM	Sch	5260 Major Gas Turbine Overhaul	Gas Turbine Major	
ST7	10/18/2019 11:34:00 PM To 11/1/2019 12:00:00 AM	Sch	4269 Other Turbine Valves	Steam Turbine valve inspections	

**Notes:**

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.
- Data is reflected at 100% ownership.

**Duke Energy Carolinas  
Base Load Power Plant  
Performance Review Plan  
October 2019**

**Marshall Station**

Unit	Duration of Outage	Type of Outage	Cause of Outage		Reason Outage Occurred	Remedial Action Taken
3	10/4/2019 12:06:00 AM To 10/28/2019 12:35:00 AM	Sch	0890	Bottom Ash Systems (Wet or Dry)	Bottom Ash Hopper Clinker Removal	
4	10/10/2019 3:28:00 PM To 10/17/2019 1:27:00 AM	Unsch	9910	Maintenance Error	DCS Controller Tripped During Reset/ Loss of Powdex Control/ H2 Cooler Damage.	

**WS Lee Combined Cycle**

Unit	Duration of Outage	Type of Outage	Cause of Outage		Reason Outage Occurred	Remedial Action Taken
WS Lee CC ST 10	10/11/2019 10:44:00 PM To 11/1/2019 12:00:00 AM	Sch	3611	Switchyard Circuit Breakers	Switchyard Balance Protection tie breaker construction	
WS Lee CC GT 11	10/11/2019 10:56:00 PM To 11/1/2019 12:00:00 AM	Sch	3611	Switchyard Circuit Breakers	Switchyard Balance Protection tie breaker construction	
WS Lee CC GT 12	10/11/2019 11:01:00 PM To 11/1/2019 12:00:00 AM	Sch	3611	Switchyard Circuit Breakers	Switchyard Balance Protection tie breaker construction	

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.
- Data is reflected at 100% ownership.

**Duke Energy Carolinas  
Base Load Power Plant Performance Review Plan**

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**October 2019  
Oconee Nuclear Station**

	<u>Unit 1</u>		<u>Unit 2</u>		<u>Unit 3</u>	
<b>(A) MDC (mW)</b>	<b>847</b>		<b>848</b>		<b>859</b>	
<b>(B) Period Hours</b>	<b>744</b>		<b>744</b>		<b>744</b>	
<b>(C) Net Gen (mWh) and Capacity Factor (%)</b>	<b>630,316</b>	<b>100.02</b>	<b>594,247</b>	<b>94.19</b>	<b>635,549</b>	<b>99.44</b>
<b>(D) Net mWh Not Gen due to Full Schedule Outages</b>	<b>0</b>	<b>0.00</b>	<b>0</b>	<b>0.00</b>	<b>0</b>	<b>0.00</b>
<b>* (E) Net mWh Not Gen due to Partial Scheduled Outages</b>	<b>0</b>	<b>0.00</b>	<b>36,020</b>	<b>5.71</b>	<b>0</b>	<b>0.00</b>
<b>(F) Net mWh Not Gen due to Full Forced Outages</b>	<b>0</b>	<b>0.00</b>	<b>0</b>	<b>0.00</b>	<b>0</b>	<b>0.00</b>
<b>* (G) Net mWh Not Gen due to Partial Forced Outages</b>	<b>-148</b>	<b>-0.02</b>	<b>645</b>	<b>0.10</b>	<b>3,547</b>	<b>0.56</b>
<b>* (H) Net mWh Not Gen due to Economic Dispatch</b>	<b>0</b>	<b>0.00</b>	<b>0</b>	<b>0.00</b>	<b>0</b>	<b>0.00</b>
<b>* (I) Core Conservation</b>	<b>0</b>	<b>0.00</b>	<b>0</b>	<b>0.00</b>	<b>0</b>	<b>0.00</b>
<b>(J) Net mWh Possible in Period</b>	<b>630,168</b>	<b>100.00%</b>	<b>630,912</b>	<b>100.00%</b>	<b>639,096</b>	<b>100.00%</b>
<b>(K) Equivalent Availability (%)</b>		<b>100.00</b>		<b>100.00</b>		<b>100.00</b>
<b>(L) Output Factor (%)</b>		<b>100.02</b>		<b>94.19</b>		<b>99.44</b>
<b>(M) Heat Rate (BTU/NkWh)</b>		<b>10,345</b>		<b>10,340</b>		<b>10,257</b>

\* Estimate  
FOOTNOTE: D and F Include Ramping Losses

**Duke Energy Carolinas**  
**Base Load Power Plant Performance Review Plan**

Exhibit B  
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**October 2019**  
**McGuire Nuclear Station**

	<u>Unit 1</u>		<u>Unit 2</u>	
(A) MDC (mW)	1158		1158	
(B) Period Hours	744		744	
(C) Net Gen (mWh) and Capacity Factor (%)	877,940	101.90	871,610	101.17
(D) Net mWh Not Gen due to Full Schedule Outages	0	0.00	0	0.00
* (E) Net mWh Not Gen due to Partial Scheduled Outages	0	0.00	0	0.00
(F) Net mWh Not Gen due to Full Forced Outages	0	0.00	0	0.00
* (G) Net mWh Not Gen due to Partial Forced Outages	-16,388	-1.90	-10,058	-1.17
* (H) Net mWh Not Gen due to Economic Dispatch	0	0.00	0	0.00
* (I) Core Conservation	0	0.00	0	0.00
(J) Net mWh Possible in Period	861,552	100.00%	861,552	100.00%
(K) Equivalent Availability (%)	100.00		100.00	
(L) Output Factor (%)	101.90		101.17	
(M) Heat Rate (BTU/NkWh)	10,003		10,090	

\* Estimate  
FOOTNOTE: D and F Include Ramping Losses

**Duke Energy Carolinas  
Base Load Power Plant Performance Review Plan**

Exhibit B  
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**October 2019  
Catawba Nuclear Station**

	<u>Unit 1</u>	<u>Unit 2</u>		
<b>(A) MDC (mW)</b>	<b>1160</b>	<b>1150</b>		
<b>(B) Period Hours</b>	<b>744</b>	<b>744</b>		
<b>(C) Net Gen (mWh) and Capacity Factor (%)</b>	<b>865,118</b>	<b>100.24</b>	<b>604,357</b>	<b>70.64</b>
<b>(D) Net mWh Not Gen due to Full Schedule Outages</b>	<b>0</b>	<b>0.00</b>	<b>226,455</b>	<b>26.47</b>
<b>* (E) Net mWh Not Gen due to Partial Scheduled Outages</b>	<b>0</b>	<b>0.00</b>	<b>24,788</b>	<b>2.89</b>
<b>(F) Net mWh Not Gen due to Full Forced Outages</b>	<b>0</b>	<b>0.00</b>	<b>0</b>	<b>0.00</b>
<b>* (G) Net mWh Not Gen due to Partial Forced Outages</b>	<b>-2,078</b>	<b>-0.24</b>	<b>0</b>	<b>0.00</b>
<b>* (H) Net mWh Not Gen due to Economic Dispatch</b>	<b>0</b>	<b>0.00</b>	<b>0</b>	<b>0.00</b>
<b>* (I) Core Conservation</b>	<b>0</b>	<b>0.00</b>	<b>0</b>	<b>0.00</b>
<b>(J) Net mWh Possible in Period</b>	<b>863,040</b>	<b>100.00%</b>	<b>855,600</b>	<b>100.00%</b>
<b>(K) Equivalent Availability (%)</b>		<b>100.00</b>		<b>70.42</b>
<b>(L) Output Factor (%)</b>		<b>100.24</b>		<b>96.06</b>
<b>(M) Heat Rate (BTU/NkWh)</b>		<b>10,166</b>		<b>10,178</b>

\* Estimate  
FOOTNOTE: D and F Include Ramping Losses

**Duke Energy Carolinas  
Base Load Power Plant  
Performance Review Plan  
October 2019**

**Belews Creek Station**

	Unit 1	Unit 2
(A) MDC (mW)	1,110	1,110
(B) Period Hrs	744	744
(C) Net Generation (mWh)	-2,061	94,377
(D) Capacity Factor (%)	0.00	11.43
(E) Net mWh Not Generated due to Full Scheduled Outages	825,840	712,213
(F) Scheduled Outages: percent of Period Hrs	100.00	86.24
(G) Net mWh Not Generated due to Partial Scheduled Outages	0	0
(H) Scheduled Derates: percent of Period Hrs	0.00	0.00
(I) Net mWh Not Generated due to Full Forced Outages	0	0
(J) Forced Outages: percent of Period Hrs	0.00	0.00
(K) Net mWh Not Generated due to Partial Forced Outages	0	0
(L) Forced Derates: percent of Period Hrs	0.00	0.00
(M) Net mWh Not Generated due to Economic Dispatch	0	19,250
(N) Economic Dispatch: percent of Period Hrs	0.00	2.33
(O) Net mWh Possible in Period	825,840	825,840
(P) Equivalent Availability (%)	0.00	13.76
(Q) Output Factor (%)	0.00	83.06
(R) Heat Rate (BTU/NkWh)	0	9,388

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.
- (R) Includes Light Off BTU's
- Data is reflected at 100% ownership.

**Duke Energy Carolinas  
Base Load Power Plant  
Performance Review Plan  
October 2019**

**Buck Combined Cycle Station**

	Unit 11	Unit 12	Unit ST10	Block Total
(A) MDC (mW)	206	206	312	724
(B) Period Hrs	744	744	744	744
(C) Net Generation (mWh)	122,202	121,267	190,350	433,819
(D) Capacity Factor (%)	79.73	79.12	82.00	80.54
(E) Net mWh Not Generated due to Full Scheduled Outages	10,238	10,238	15,990	36,466
(F) Scheduled Outages: percent of Period Hrs	6.68	6.68	6.89	6.77
(G) Net mWh Not Generated due to Partial Scheduled Outages	9,720	9,720	2,771	22,211
(H) Scheduled Derates: percent of Period Hrs	6.34	6.34	1.19	4.12
(I) Net mWh Not Generated due to Full Forced Outages	0	0	0	0
(J) Forced Outages: percent of Period Hrs	0.00	0.00	0.00	0.00
(K) Net mWh Not Generated due to Partial Forced Outages	0	0	0	0
(L) Forced Derates: percent of Period Hrs	0.00	0.00	0.00	0.00
(M) Net mWh Not Generated due to Economic Dispatch	11,104	12,039	23,017	46,159
(N) Economic Dispatch: percent of Period Hrs	7.24	7.85	9.92	8.57
(O) Net mWh Possible in Period	153,264	153,264	232,128	538,656
(P) Equivalent Availability (%)	86.98	86.98	91.92	89.11
(Q) Output Factor (%)	85.44	84.79	88.07	86.39
(R) Heat Rate (BTU/NkWh)	10,019	9,875	2,592	6,720

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.
- (R) Includes Light Off BTU's
- Data is reflected at 100% ownership.

**Duke Energy Carolinas  
Base Load Power Plant  
Performance Review Plan  
October 2019**

**Dan River Combined Cycle Station**

	Unit 8	Unit 9	Unit ST07	Block Total
(A) MDC (mW)	199	199	320	718
(B) Period Hrs	744	744	744	744
(C) Net Generation (mWh)	76,168	75,753	117,496	269,417
(D) Capacity Factor (%)	51.45	51.17	49.35	50.43
(E) Net mWh Not Generated due to Full Scheduled Outages	62,052	62,052	99,979	224,082
(F) Scheduled Outages: percent of Period Hrs	41.91	41.91	41.99	41.95
(G) Net mWh Not Generated due to Partial Scheduled Outages	6,051	6,051	0	12,101
(H) Scheduled Derates: percent of Period Hrs	4.09	4.09	0.00	2.27
(I) Net mWh Not Generated due to Full Forced Outages	0	0	0	0
(J) Forced Outages: percent of Period Hrs	0.00	0.00	0.00	0.00
(K) Net mWh Not Generated due to Partial Forced Outages	0	0	0	0
(L) Forced Derates: percent of Period Hrs	0.00	0.00	0.00	0.00
(M) Net mWh Not Generated due to Economic Dispatch	3,786	4,201	20,605	28,592
(N) Economic Dispatch: percent of Period Hrs	2.56	2.84	8.65	5.35
(O) Net mWh Possible in Period	148,056	148,056	238,080	534,192
(P) Equivalent Availability (%)	54.00	54.00	58.01	55.79
(Q) Output Factor (%)	88.56	88.08	85.08	86.88
(R) Heat Rate (BTU/NkWh)	11,204	11,259	2,793	7,551

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.
- (R) Includes Light Off BTU's
- Data is reflected at 100% ownership.



**Duke Energy Carolinas  
Base Load Power Plant  
Performance Review Plan  
October 2019**

**Marshall Station**

	Unit 3	Unit 4
(A) MDC (mW)	658	660
(B) Period Hrs	744	744
(C) Net Generation (mWh)	77,324	317,068
(D) Capacity Factor (%)	15.79	64.57
(E) Net mWh Not Generated due to Full Scheduled Outages	379,326	0
(F) Scheduled Outages: percent of Period Hrs	77.48	0.00
(G) Net mWh Not Generated due to Partial Scheduled Outages	0	4,440
(H) Scheduled Derates: percent of Period Hrs	0.00	0.90
(I) Net mWh Not Generated due to Full Forced Outages	0	101,629
(J) Forced Outages: percent of Period Hrs	0.00	20.70
(K) Net mWh Not Generated due to Partial Forced Outages	909	7,280
(L) Forced Derates: percent of Period Hrs	0.19	1.48
(M) Net mWh Not Generated due to Economic Dispatch	31,993	60,623
(N) Economic Dispatch: percent of Period Hrs	6.54	12.35
(O) Net mWh Possible in Period	489,552	491,040
(P) Equivalent Availability (%)	22.33	76.92
(Q) Output Factor (%)	70.15	81.42
(R) Heat Rate (BTU/NkWh)	10,274	9,341

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.
- (R) Includes Light Off BTU's
- Data is reflected at 100% ownership.

**Duke Energy Carolinas  
Base Load Power Plant  
Performance Review Plan  
October 2019**

**WS Lee Combined Cycle**

	Unit 11	Unit 12	Unit ST10	Block Total
(A) MDC (mW)	237	236	337	810
(B) Period Hrs	744	744	744	744
(C) Net Generation (mWh)	59,402	60,356	85,672	205,430
(D) Capacity Factor (%)	33.69	34.37	34.17	34.09
(E) Net mWh Not Generated due to Full Scheduled Outages	114,013	113,512	162,187	389,712
(F) Scheduled Outages: percent of Period Hrs	64.66	64.65	64.69	64.67
(G) Net mWh Not Generated due to Partial Scheduled Outages	1,841	1,710	3,153	6,703
(H) Scheduled Derates: percent of Period Hrs	1.04	0.97	1.26	1.11
(I) Net mWh Not Generated due to Full Forced Outages	0	0	0	0
(J) Forced Outages: percent of Period Hrs	0.00	0.00	0.00	0.00
(K) Net mWh Not Generated due to Partial Forced Outages	0	0	0	0
(L) Forced Derates: percent of Period Hrs	0.00	0.00	0.00	0.00
(M) Net mWh Not Generated due to Economic Dispatch	1,073	6	0	1,079
(N) Economic Dispatch: percent of Period Hrs	0.61	0.00	0.00	0.18
(O) Net mWh Possible in Period	176,328	175,584	250,728	602,640
(P) Equivalent Availability (%)	34.30	34.38	34.06	34.22
(Q) Output Factor (%)	95.33	97.24	96.76	96.48
(R) Heat Rate (BTU/NkWh)	10,616	10,374	2,516	7,167

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.
- (R) Includes Light Off BTU's
- Data is reflected at 100% ownership.

**Duke Energy Carolinas  
Intermediate Power Plant Performance  
Review Plan  
October 2019**

**Cliffside Station**

**Cliffside 6**

(A)	MDC (mW)	849
(B)	Period Hrs	744
(C)	Net Generation (mWh)	445,337
(D)	Net mWh Possible in Period	631,656
(E)	Equivalent Availability (%)	88.34
(F)	Output Factor (%)	86.17
(G)	Capacity Factor (%)	70.50

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.

**Duke Energy Carolinas  
Peaking Power Plant Performance  
Review Plan  
October 2019**

**Cliffside Station**

**Unit 5**

<b>(A) MDC (mW)</b>	546
<b>(B) Period Hrs</b>	744
<b>(C) Net Generation (mWh)</b>	111,766
<b>(D) Net mWh Possible in Period</b>	406,224
<b>(E) Equivalent Availability (%)</b>	55.46
<b>(F) Output Factor (%)</b>	66.84
<b>(G) Capacity Factor (%)</b>	27.51

**Notes:**

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.

**Duke Energy Carolinas  
Base Load Power Plant Performance Review Plan**

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**November 2018 - October 2019  
Oconee Nuclear Station**

	<u>Unit 1</u>		<u>Unit 2</u>		<u>Unit 3</u>	
<b>(A) MDC (mW)</b>	<b>847</b>		<b>848</b>		<b>859</b>	
<b>(B) Period Hours</b>	<b>8760</b>		<b>8760</b>		<b>8760</b>	
<b>(C) Net Gen (mWh) and Capacity Factor (%)</b>	<b>7,035,932</b>	<b>94.83</b>	<b>7,547,046</b>	<b>101.60</b>	<b>7,594,168</b>	<b>100.92</b>
<b>(D) Net mWh Not Gen due to Full Schedule Outages</b>	<b>278,748</b>	<b>3.76</b>	<b>0</b>	<b>0.00</b>	<b>0</b>	<b>0.00</b>
<b>* (E) Net mWh Not Gen due to Partial Scheduled Outages</b>	<b>10,925</b>	<b>0.15</b>	<b>36,475</b>	<b>0.49</b>	<b>452</b>	<b>0.01</b>
<b>(F) Net mWh Not Gen due to Full Forced Outages</b>	<b>151,754</b>	<b>2.05</b>	<b>0</b>	<b>0.00</b>	<b>0</b>	<b>0.00</b>
<b>* (G) Net mWh Not Gen due to Partial Forced Outages</b>	<b>-57,639</b>	<b>-0.79</b>	<b>-155,041</b>	<b>-2.09</b>	<b>-69,780</b>	<b>-0.93</b>
<b>* (H) Net mWh Not Gen due to Economic Dispatch</b>	<b>0</b>	<b>0.00</b>	<b>0</b>	<b>0.00</b>	<b>0</b>	<b>0.00</b>
<b>* (I) Core Conservation</b>	<b>0</b>	<b>0.00</b>	<b>0</b>	<b>0.00</b>	<b>0</b>	<b>0.00</b>
<b>(J) Net mWh Possible in Period</b>	<b>7,419,720</b>	<b>100.00%</b>	<b>7,428,480</b>	<b>100.00%</b>	<b>7,524,840</b>	<b>100.00%</b>
<b>(K) Equivalent Availability (%)</b>		<b>93.68</b>		<b>99.99</b>		<b>99.99</b>
<b>(L) Output Factor (%)</b>		<b>100.67</b>		<b>101.60</b>		<b>100.92</b>
<b>(M) Heat Rate (BTU/NkWh)</b>		<b>10,227</b>		<b>10,123</b>		<b>10,109</b>

\* Estimate  
FOOTNOTE: D and F Include Ramping Losses

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**Duke Energy Carolinas  
Base Load Power Plant Performance Review Plan**

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**November 2018 - October 2019  
McGuire Nuclear Station**

	<u>Unit 1</u>	<u>Unit 2</u>		
(A) MDC (mW)	1158	1158		
(B) Period Hours	8760	8760		
(C) Net Gen (mWh) and Capacity Factor (%)	9,278,038	91.46	10,326,563	101.80
(D) Net mWh Not Gen due to Full Schedule Outages	687,852	6.78	0	0.00
* (E) Net mWh Not Gen due to Partial Scheduled Outages	66,426	0.65	710	0.01
(F) Net mWh Not Gen due to Full Forced Outages	165,690	1.63	0	0.00
* (G) Net mWh Not Gen due to Partial Forced Outages	-53,926	-0.52	-183,193	-1.81
* (H) Net mWh Not Gen due to Economic Dispatch	0	0.00	0	0.00
* (I) Core Conservation	0	0.00	0	0.00
(J) Net mWh Possible in Period	10,144,080	100.00%	10,144,080	100.00%
(K) Equivalent Availability (%)		90.28		99.99
(L) Output Factor (%)		99.87		101.80
(M) Heat Rate (BTU/NkWh)		10,023		10,030

\* Estimate  
FOOTNOTE: D and F Include Ramping Losses

**Duke Energy Carolinas  
Base Load Power Plant Performance Review Plan**

Exhibit B  
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**November 2018 - October 2019  
Catawba Nuclear Station**

	<u>Unit 1</u>	<u>Unit 2</u>		
<b>(A) MDC (mW)</b>	<b>1160</b>	<b>1150</b>		
<b>(B) Period Hours</b>	<b>8760</b>	<b>8760</b>		
<b>(C) Net Gen (mWh) and Capacity Factor (%)</b>	<b>9,496,129</b>	<b>93.45</b>	<b>9,342,224</b>	<b>92.74</b>
<b>(D) Net mWh Not Gen due to Full Schedule Outages</b>	<b>682,776</b>	<b>6.72</b>	<b>690,595</b>	<b>6.86</b>
<b>* (E) Net mWh Not Gen due to Partial Scheduled Outages</b>	<b>46,368</b>	<b>0.46</b>	<b>89,923</b>	<b>0.89</b>
<b>(F) Net mWh Not Gen due to Full Forced Outages</b>	<b>0</b>	<b>0.00</b>	<b>0</b>	<b>0.00</b>
<b>* (G) Net mWh Not Gen due to Partial Forced Outages</b>	<b>-63,673</b>	<b>-0.63</b>	<b>-48,742</b>	<b>-0.49</b>
<b>* (H) Net mWh Not Gen due to Economic Dispatch</b>	<b>0</b>	<b>0.00</b>	<b>0</b>	<b>0.00</b>
<b>* (I) Core Conservation</b>	<b>0</b>	<b>0.00</b>	<b>0</b>	<b>0.00</b>
<b>(J) Net mWh Possible in Period</b>	<b>10,161,600</b>	<b>100.00%</b>	<b>10,074,000</b>	<b>100.00%</b>
<b>(K) Equivalent Availability (%)</b>		<b>92.98</b>		<b>92.80</b>
<b>(L) Output Factor (%)</b>		<b>100.18</b>		<b>99.56</b>
<b>(M) Heat Rate (BTU/NkWh)</b>		<b>10,118</b>		<b>10,071</b>

\* Estimate  
FOOTNOTE: D and F Include Ramping Losses

**Duke Energy Carolinas  
Base Load Power Plant  
Performance Review Plan  
November, 2018 through October, 2019**

**Belews Creek Station**

	Unit 1	Unit 2
(A) MDC (mW)	1,110	1,110
(B) Period Hrs	8,760	8,760
(C) Net Generation (mWh)	4,025,065	3,458,309
(D) Capacity Factor (%)	41.39	35.57
(E) Net mWh Not Generated due to Full Scheduled Outages	2,344,875	2,664,333
(F) Scheduled Outages: percent of Period Hrs	24.12	27.40
(G) Net mWh Not Generated due to Partial Scheduled Outages	2,443	14,669
(H) Scheduled Derates: percent of Period Hrs	0.03	0.15
(I) Net mWh Not Generated due to Full Forced Outages	87,228	138,325
(J) Forced Outages: percent of Period Hrs	0.90	1.42
(K) Net mWh Not Generated due to Partial Forced Outages	80,594	119,843
(L) Forced Derates: percent of Period Hrs	0.83	1.23
(M) Net mWh Not Generated due to Economic Dispatch	3,183,396	3,328,121
(N) Economic Dispatch: percent of Period Hrs	32.74	34.23
(O) Net mWh Possible in Period	9,723,600	9,723,600
(P) Equivalent Availability (%)	74.13	69.79
(Q) Output Factor (%)	75.27	69.63
(R) Heat Rate (BTU/NkWh)	9,259	9,532

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.
- Data is reflected at 100% ownership.
- Footnote: (R) Includes Light Off BTU's



**Duke Energy Carolinas  
Base Load Power Plant  
Performance Review Plan  
November, 2018 through October, 2019**

**Buck Combined Cycle Station**

	Unit 11	Unit 12	Unit ST10	Block Total
(A) MDC (mW)	206	206	312	724
(B) Period Hrs	8,760	8,760	8,760	8,760
(C) Net Generation (mWh)	1,267,333	1,270,297	1,882,982	4,420,612
(D) Capacity Factor (%)	70.23	70.39	68.89	69.70
(E) Net mWh Not Generated due to Full Scheduled Outages	285,756	287,325	434,252	1,007,334
(F) Scheduled Outages: percent of Period Hrs	15.84	15.92	15.89	15.88
(G) Net mWh Not Generated due to Partial Scheduled Outages	124,201	124,111	23,481	271,794
(H) Scheduled Derates: percent of Period Hrs	6.88	6.88	0.86	4.29
(I) Net mWh Not Generated due to Full Forced Outages	185	0	0	185
(J) Forced Outages: percent of Period Hrs	0.01	0.00	0.00	0.00
(K) Net mWh Not Generated due to Partial Forced Outages	0	0	0	0
(L) Forced Derates: percent of Period Hrs	0.00	0.00	0.00	0.00
(M) Net mWh Not Generated due to Economic Dispatch	127,084	122,826	392,405	642,315
(N) Economic Dispatch: percent of Period Hrs	7.04	6.81	14.36	10.13
(O) Net mWh Possible in Period	1,804,560	1,804,560	2,733,120	6,342,240
(P) Equivalent Availability (%)	77.27	77.20	83.25	79.83
(Q) Output Factor (%)	84.18	84.37	82.30	83.43
(R) Heat Rate (BTU/NkWh)	10,245	10,008	2,347	6,813

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.
- Data is reflected at 100% ownership.
- Footnote: (R) Includes Light Off BTU's

**Duke Energy Carolinas  
Base Load Power Plant  
Performance Review Plan  
November, 2018 through October, 2019**

**Dan River Combined Cycle Station**

	Unit 8	Unit 9	Unit ST07	Block Total
(A) MDC (mW)	199	199	320	718
(B) Period Hrs	8,760	8,760	8,760	8,760
(C) Net Generation (mWh)	1,421,994	1,414,450	2,120,934	4,957,378
(D) Capacity Factor (%)	81.57	81.14	75.66	78.82
(E) Net mWh Not Generated due to Full Scheduled Outages	127,377	128,212	206,736	462,325
(F) Scheduled Outages: percent of Period Hrs	7.31	7.35	7.37	7.35
(G) Net mWh Not Generated due to Partial Scheduled Outages	134,823	134,767	2,754	272,344
(H) Scheduled Derates: percent of Period Hrs	7.73	7.73	0.10	4.33
(I) Net mWh Not Generated due to Full Forced Outages	1,071	1,078	2,411	4,560
(J) Forced Outages: percent of Period Hrs	0.06	0.06	0.09	0.07
(K) Net mWh Not Generated due to Partial Forced Outages	0	0	588	588
(L) Forced Derates: percent of Period Hrs	0.00	0.00	0.02	0.01
(M) Net mWh Not Generated due to Economic Dispatch	57,975	64,733	469,778	592,485
(N) Economic Dispatch: percent of Period Hrs	3.33	3.71	16.76	9.42
(O) Net mWh Possible in Period	1,743,240	1,743,240	2,803,200	6,289,680
(P) Equivalent Availability (%)	84.90	84.85	92.42	88.24
(Q) Output Factor (%)	88.46	88.80	82.27	85.79
(R) Heat Rate (BTU/NkWh)	10,649	10,625	2,481	7,148

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.
- Data is reflected at 100% ownership.
- Footnote: (R) Includes Light Off BTU's

**Duke Energy Carolinas  
Base Load Power Plant  
Performance Review Plan  
November, 2018 through October, 2019**

**Marshall Station**

	Unit 3	Unit 4
(A) MDC (mW)	658	660
(B) Period Hrs	8,760	8,760
(C) Net Generation (mWh)	2,414,079	3,110,417
(D) Capacity Factor (%)	41.88	53.80
(E) Net mWh Not Generated due to Full Scheduled Outages	885,185	799,205
(F) Scheduled Outages: percent of Period Hrs	15.36	13.82
(G) Net mWh Not Generated due to Partial Scheduled Outages	0	5,730
(H) Scheduled Derates: percent of Period Hrs	0.00	0.10
(I) Net mWh Not Generated due to Full Forced Outages	602,278	317,174
(J) Forced Outages: percent of Period Hrs	10.45	5.49
(K) Net mWh Not Generated due to Partial Forced Outages	21,919	94,904
(L) Forced Derates: percent of Period Hrs	0.38	1.64
(M) Net mWh Not Generated due to Economic Dispatch	1,840,618	1,454,170
(N) Economic Dispatch: percent of Period Hrs	31.93	25.15
(O) Net mWh Possible in Period	5,764,080	5,781,600
(P) Equivalent Availability (%)	73.81	78.95
(Q) Output Factor (%)	71.06	74.39
(R) Heat Rate (BTU/NkWh)	9,740	9,484

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.
- Data is reflected at 100% ownership.
- Footnote: (R) Includes Light Off BTU's

**Duke Energy Carolinas  
Base Load Power Plant  
Performance Review Plan  
November, 2018 through October, 2019**

**WS Lee Combined Cycle**

	Unit 11	Unit 12	Unit ST10	Block Total
(A) MDC (mW)	235	234	337	806
(B) Period Hrs	8,760	8,760	8,760	8,760
(C) Net Generation (mWh)	1,570,841	1,567,361	2,171,181	5,309,383
(D) Capacity Factor (%)	76.42	76.52	73.55	75.25
(E) Net mWh Not Generated due to Full Scheduled Outages	308,572	312,645	435,528	1,056,745
(F) Scheduled Outages: percent of Period Hrs	15.01	15.26	14.75	14.98
(G) Net mWh Not Generated due to Partial Scheduled Outages	28,243	25,740	104,773	158,756
(H) Scheduled Derates: percent of Period Hrs	1.37	1.26	3.55	2.25
(I) Net mWh Not Generated due to Full Forced Outages	95,978	108,623	143,169	347,771
(J) Forced Outages: percent of Period Hrs	4.67	5.30	4.85	4.93
(K) Net mWh Not Generated due to Partial Forced Outages	0	0	173	173
(L) Forced Derates: percent of Period Hrs	0.00	0.00	0.01	0.00
(M) Net mWh Not Generated due to Economic Dispatch	51,975	33,946	97,297	183,218
(N) Economic Dispatch: percent of Period Hrs	2.53	1.66	3.30	2.60
(O) Net mWh Possible in Period	2,055,610	2,048,315	2,952,120	7,056,045
(P) Equivalent Availability (%)	78.87	78.09	76.84	77.84
(Q) Output Factor (%)	95.69	96.88	92.04	94.50
(R) Heat Rate (BTU/NkWh)	10,303	10,205	2,615	7,130

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.
- Data is reflected at 100% ownership.
- Footnote: (R) Includes Light Off BTU's

**Duke Energy Carolinas  
Intermediate Power Plant  
Performance Review Plan  
November, 2018 through October, 2019**

**Cliffside Station**

<b>Units</b>	<b>Unit 6</b>
(A) MDC (mW)	848
(B) Period Hrs	8,760
(C) Net Generation (mWh)	4,401,066
(D) Net mWh Possible in Period	7,429,915
(E) Equivalent Availability (%)	78.38
(F) Output Factor (%)	81.34
(G) Capacity Factor (%)	59.23

**Notes:**

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.

**Duke Energy Carolinas  
Peaking Power Plant  
Performance Review Plan  
November, 2018 through October, 2019**

**Cliffside Station**

<b>Units</b>	<b>Unit 5</b>
(A) MDC (mW)	546
(B) Period Hrs	8,760
(C) Net Generation (mWh)	1,540,373
(D) Net mWh Possible in Period	4,782,960
(E) Equivalent Availability (%)	71.91
(F) Output Factor (%)	66.93
(G) Capacity Factor (%)	32.21

**Notes:**

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.

**Duke Energy Carolinas**  
**Outages for 100 mW or Larger Units**  
**October, 2019**

Exhibit B  
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<u>Unit Name</u>	<u>Capacity Rating (mW)</u>	<u>Full Outage Hours</u>		<u>Total</u>
		<u>Scheduled</u>	<u>Unscheduled</u>	
Oconee 1	847	0.00	0.00	0.00
Oconee 2	848	0.00	0.00	0.00
Oconee 3	859	0.00	0.00	0.00
McGuire 1	1,158	0.00	0.00	0.00
McGuire 2	1,158	0.00	0.00	0.00
Catawba 1	1,160	0.00	0.00	0.00
Catawba 2	1,150	196.92	0.00	196.92

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**Duke Energy Carolinas**  
**Outages for 100 mW or Larger Units**  
**October 2019**

Unit Name	Capacity Rating (mW)	Full Outage Hours		Total Outage Hours
		Scheduled	Unscheduled	
Allen Steam 1	167	131.02	0.00	131.02
Allen Steam 2	167	114.02	0.00	114.02
Allen Steam 3	270	268.02	0.00	268.02
Allen Steam 4	267	114.02	0.00	114.02
Allen Steam 5	259	127.02	0.00	127.02
Belews Creek Steam 1	1,110	744.00	0.00	744.00
Belews Creek Steam 2	1,110	641.63	0.00	641.63
Buck CC 11	206	49.70	0.00	49.70
Buck CC 12	206	49.70	0.00	49.70
Buck CC ST10	312	51.25	0.00	51.25
Cliffside Steam 5	546	292.78	37.07	329.85
Cliffside Steam 6	849	17.35	69.40	86.75
Dan River CC 8	199	311.82	0.00	311.82
Dan River CC 9	199	311.82	0.00	311.82
Dan River CC ST7	320	312.43	0.00	312.43
Lee Steam 3	173	479.98	0.00	479.98
Marshall Steam 1	380	744.00	0.00	744.00
Marshall Steam 2	380	70.88	0.00	70.88
Marshall Steam 3	658	576.48	0.00	576.48
Marshall Steam 4	660	0.00	153.98	153.98
Rockingham CT1	179	228.37	0.00	228.37
Rockingham CT2	179	392.58	0.00	392.58
Rockingham CT3	179	212.82	0.00	212.82
Rockingham CT4	179	43.58	0.00	43.58
Rockingham CT5	179	48.85	0.00	48.85

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.
- Data is reflected at 100% ownership.



**Duke Energy Carolinas**  
**Outages for 100 mW or Larger Units**  
**October 2019**

Unit Name	Capacity Rating (mW)	Full Outage Hours		Total Outage Hours
		Scheduled	Unscheduled	
WS Lee CC 11	237	481.07	0.00	481.07
WS Lee CC 12	236	480.98	0.00	480.98
WS Lee CC ST 10	337	481.27	0.00	481.27

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.
- Data is reflected at 100% ownership.